



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/008, 524  
Source: OIPR  
Date Processed by STIC: 7-3-02

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

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- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER**  
**VERSION 3.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND  
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:  
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202  
Or  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Corrected Diskette Needed



See page 7

OIPE

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/008,524DATE: 07/03/2002  
TIME: 09:41:31Input Set : A:\Cms0173.txt  
Output Set: N:\CRF3\07032002\J008524.raw

3 <110> APPLICANT: Doorbar, John  
 5 <120> TITLE OF INVENTION: IMPROVEMENTS IN OR RELATING TO SCREENING FOR PAPILLOMA  
 6 VIRUSES  
 8 <130> FILE REFERENCE: 18396/1074  
 10 <140> CURRENT APPLICATION NUMBER: 10/008,524  
 C--> 11 <141> CURRENT FILING DATE: 2002-06-17  
 13 <150> PRIOR APPLICATION NUMBER: 09/314,268  
 14 <151> PRIOR FILING DATE: 1999-05-18  
 16 <160> NUMBER OF SEQ ID NOS: 179  
 18 <170> SOFTWARE: PatentIn Ver. 2.1  
 20 <210> SEQ ID NO: 1  
 21 <211> LENGTH: 375  
 22 <212> TYPE: DNA  
 23 <213> ORGANISM: Human papillomavirus type 16  
 25 <400> SEQUENCE: 1  
 26 ggcgtgcac ttcagaagt tattgtcaaa aacttgcac ttgctttggc aaatagctct 60  
 27 cggaaatgctg tcgctcttc tgccagccct caactgaaag aggcccagtc agagaaggaa 120  
 28 qaaagcccaa agccacttca caaaagtatgt gtatgttta gtaaaaaact cagtaagaag 180  
 29 cagagtgaac taaatgggat cgcagcctct ctaggagcag attacaggtg gagttttgat 240  
 30 qaaacagtga ctcatttcat ctatcaaggg cggccaaatg acactaatcg ggagtataaa 300  
 31 tctgtaaaag aaagaggagt acacattgtt tccgagcaact ggcttttaga ttgtgccccaa 360  
 32 gagtgtaaac atctt 375  
 35 <210> SEQ ID NO: 2  
 36 <211> LENGTH: 125  
 37 <212> TYPE: PRT  
 38 <213> ORGANISM: Homo sapiens  
 40 <400> SEQUENCE: 2  
 41 Ala Leu Pro Leu Ser Glu Val Ile Val Lys Asn Leu Gln Leu Ala Leu  
 42 1 5 10 15  
 44 Ala Asn Ser Ser Arg Asn Ala Val Ala Leu Ser Ala Ser Pro Gln Leu  
 45 20 25 30  
 47 Lys Glu Ala Gln Ser Glu Lys Glu Ala Pro Lys Pro Leu His Lys  
 48 35 40 45  
 50 Val Val Val Cys Val Ser Lys Lys Leu Ser Lys Lys Gln Ser Glu Leu  
 51 50 55 60  
 53 Asn Gly Ile Ala Ala Ser Leu Gly Ala Asp Tyr Arg Trp Ser Phe Asp  
 54 65 70 75 80  
 81

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/008,524

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TIME: 09:41:31

Input Set : A:\Cms0173.txt  
Output Set: N:\CRF3\07032002\J008524.raw

66 <210> SEQ ID NO: 3  
67 <211> LENGTH: 491  
68 <212> TYPE: PRT  
69 <213> ORGANISM: Homo sapiens  
71 <400> SEQUENCE: 3  
72 Ala Pro Glu Glu His Asp Ser Pro Thr Glu Ala Ser Gln Pro Ile Val  
73 1 5 10 15  
75 Glu Glu Glu Glu Thr Lys Thr Phe Lys Asp Leu Gly Val Thr Asp Val  
76 20 25 30  
78 Leu Cys Glu Ala Cys Asp Gln Leu Gly Trp Thr Lys Pro Thr Lys Ile  
79 35 40 45  
81 Gln Ile Glu Ala Tyr Ser Leu Ala Leu Gln Gly Arg Asp Ile Ile Gly  
82 50 55 60  
84 Leu Ala Glu Thr Cly Ser Cly Lys Thr Gly Ala Phe Ala Leu Pro Ile  
85 65 70 75 80  
87 Leu Asn Ala Leu Leu Glu Thr Pro Gln Arg Leu Phe Ala Leu Val Leu  
88 85 90 95  
90 Thr Pro Thr Arg Ser Trp Pro Phe Arg Ser Gln Ser Ser Leu Lys Pro  
91 100 105 110  
93 Trp Ser Ser Ile Gly Val Gln Ser Ala Val Ile Val Gly Gly Ile Asp  
94 115 120 125  
96 Ser Met Ser Gln Ser Leu Ala Leu Ala Lys Lys Pro His Ile Ile Ile  
97 130 135 140  
99 Ala Thr Pro Gly Arg Leu Ile Asp His Leu Glu Asn Thr Lys Gly Phe  
100 145 150 155 160  
102 Asn Leu Arg Ala Leu Lys Tyr Leu Val Met Asp Glu Ala Asp Arg Ile  
103 165 170 175  
105 Leu Asn Met Asp Phe Glu Thr Glu Val Asp Lys Ile Leu Lys Val Ile  
106 180 185 190  
108 Pro Arg Asp Arg Lys Thr Phe Leu Phe Ser Ala Thr Met Thr Lys Lys  
109 195 200 205  
111 Val Gln Lys Leu Gln Arg Ala Ala Leu Lys Asn Pro Val Lys Cys Ala  
112 210 215 220  
114 Val Ser Ser Lys Tyr Gln Thr Val Glu Lys Leu Gln Gln Tyr Tyr Ile  
115 225 230 235 240  
117 Phe Ile Pro Ser Lys Phe Lys Asp Thr Tyr Leu Val Tyr Ile Leu Asn  
118 245 250 255  
120 Glu Leu Ala Gly Asn Ser Phe Met Ile Phe Cys Ser Thr Cys Asn Asn  
121 260 265 270  
123 Thr Gln Arg Thr Ala Leu Leu Arg Asn Leu Gly Phe Thr Ala Val  
124 275 280 285  
126 Pro Leu His Gly Gln Met Ser Lys Arg Leu Gly Ser Leu Asn Lys Phe  
127 290 295 300  
129 Lys Ala Lys Ala Arg Ser Ile Leu Leu Ala Thr Asp Val Ala Ser Arg  
130 305 310 315 320  
132 Gly Leu Asp Ile Pro His Val Asp Val Val Asn Phe Asp Ile Pro

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Input Set : A:\Cms0173.txt  
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13d Gly Arg Ser Gly Lys Ala Ile Thr Phe Val Thr Cln Tyr Asp Val Glu  
139 355 360 365  
141 Leu Phe Gln Arg Ile Glu His Leu Ile Gly Lys Lys Leu Pro Gly Phe  
142 370 375 380  
144 Pro Thr Gln Asp Asp Glu Val Met Met Leu Thr Glu Arg Val Ala Glu  
145 385 390 395 400  
147 Ala Gln Arg Phe Ala Arg Met Glu Leu Arg Glu His Gly Glu Lys Lys  
148 405 410 415  
150 Lys Arg Ser Arg Glu Asp Ala Gly Asp Asn Asp Asp Thr Arg Gly Cys  
151 420 425 430  
153 Tyr Val Cys Gln Glu Gln Gly Gly Trp Arg Lys Asn Glu Glu Ala Glu  
154 435 440 445  
156 Arg Pro Leu Ile Thr Phe Met Lys Ala Arg Val Leu Leu Phe Cys Lys  
157 450 455 460  
159 Arg Glu Leu Glu Asn Glu Thr Cys Ser Asn Arg Asp His Glu Thr Glu  
160 465 470 475 480  
162 Ile Gly Gln Asn Cys Val Gln Asn Val Leu Ser  
163 485 490  
166 <210> SEQ ID NO: 4  
167 <211> LENGTH: 25  
168 <212> TYPE: PRT  
169 <213> ORGANISM: Human papillomavirus type 16  
171 <400> SEQUENCE: 4  
172 Arg Pro Ile Pro Lys Pro Ser Pro Trp Ala Pro Lys Lys His Arg Arg  
173 1 5 10 15  
175 Leu Ser Asp Gln Asp Ser Gln Thr Pro  
176 20 25  
179 <210> SEQ ID NO: 5  
180 <211> LENGTH: 8  
181 <212> TYPE: PRT  
182 <213> ORGANISM: Artificial Sequence  
184 <220> FEATURE:  
185 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic  
186 octapeptide antigen  
188 <400> SEQUENCE: 5  
189 Met Ala Asp Pro Ala Ala Ala Thr  
190 1 5  
193 <210> SEQ ID NO: 6  
194 <211> LENGTH: 8  
195 <212> TYPE: PRT  
196 <213> ORGANISM: Artificial Sequence  
198 <220> FEATURE:  
199 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic  
200 octapeptide antigen  
202 <400> SEQUENCE: 6  
203 Ala Asp Pro Ala Ala Ala Thr Lys

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Input Set : A:\Cms0173.txt  
Output Set: N:\CRF3\07032002\J008524.raw

209 <212> TYPE: PRT  
210 <213> ORGANISM: Artificial Sequence  
212 <220> FEATURE:  
213 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic  
214 octapeptide antigen  
216 <400> SEQUENCE: 7  
217 Asp Pro Ala Ala Ala Thr Lys Tyr  
218 1 5  
221 <210> SEQ ID NO: 8  
222 <211> LENGTH: 8  
223 <212> TYPE: PRT  
224 <213> ORGANISM: Artificial Sequence  
226 <220> FEATURE:  
227 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic  
228 octapeptide antigen  
230 <400> SEQUENCE: 8  
231 Pro Ala Ala Ala Thr Lys Tyr Pro  
232 1 5  
235 <210> SEQ ID NO: 9  
236 <211> LENGTH: 8  
237 <212> TYPE: PRT  
238 <213> ORGANISM: Artificial Sequence  
240 <220> FEATURE:  
241 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic  
242 octapeptide antigen  
244 <400> SEQUENCE: 9  
245 Ala Ala Ala Thr Lys Tyr Pro Leu  
246 1 5  
249 <210> SEQ ID NO: 10  
250 <211> LENGTH: 8  
251 <212> TYPE: PRT  
252 <213> ORGANISM: Artificial Sequence  
254 <220> FEATURE:  
255 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic  
256 octapeptide antigen  
258 <400> SEQUENCE: 10  
259 Ala Ala Ala Thr Lys Tyr Pro Leu Leu  
260 1 5  
263 <210> SEQ ID NO: 11  
264 <211> LENGTH: 8  
265 <212> TYPE: PRT  
266 <213> ORGANISM: Artificial Sequence  
268 <220> FEATURE:  
269 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic  
270 octapeptide antigen  
272 <400> SEQUENCE: 11

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/008,524

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Input Set : A:\Cms0173.txt  
Output Set: N:\CRF3\07032002\J008524.raw

278 <211> LENGTH: 8  
279 <212> TYPE: PRT  
280 <213> ORGANISM: Artificial Sequence  
282 <220> FEATURE:  
283 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic  
284 octapeptide antigen  
286 <400> SEQUENCE: 12  
287 Thr Lys Tyr Pro Leu Leu Lys Leu  
288 1 5  
291 <210> SEQ ID NO: 13  
292 <211> LENGTH: 8  
293 <212> TYPE: PRT  
294 <213> ORGANISM: Artificial Sequence  
296 <220> FEATURE:  
297 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic  
298 octapeptide antigen  
300 <400> SEQUENCE: 13  
301 Lys Tyr Pro Leu Leu Lys Leu Leu  
302 1 5  
305 <210> SEQ ID NO: 14  
306 <211> LENGTH: 8  
307 <212> TYPE: PRT  
308 <213> ORGANISM: Artificial Sequence  
310 <220> FEATURE:  
311 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic  
312 octapeptide antigen  
314 <400> SEQUENCE: 14  
315 Tyr Pro Leu Leu Lys Leu Leu Gly  
316 1 5  
319 <210> SEQ ID NO: 15  
320 <211> LENGTH: 8  
321 <212> TYPE: PRT  
322 <213> ORGANISM: Artificial Sequence  
324 <220> FEATURE:  
325 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic  
326 octapeptide antigen  
328 <400> SEQUENCE: 15  
329 Pro Leu Leu Lys Leu Leu Gly Ser  
330 1 5  
333 <210> SEQ ID NO: 16  
334 <211> LENGTH: 8  
335 <212> TYPE: PRT  
336 <213> ORGANISM: Artificial Sequence  
338 <220> FEATURE:  
339 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic  
340 octapeptide antigen

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/008,524

DATE: 07/03/2002  
TIME: 09:41:32

Input Set : A:\Cms0173.txt  
Output Set: N:\CRF3\07032002\J008524.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:174; N Pos. 24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42  
Seq#:174; N Pos. 43,44,45,46,47,48,49  
Seq#:177; N Pos. 41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59  
Seq#:177; N Pos. 60,61,62,63,64,65,66  
Seq#:178; N Pos. 24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42  
Seq#:178; N Pos. 43,44,45,46,47,48,49

VARIABLE LOCATION SUMMARY  
PATENT APPLICATION: US/10/008,524

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Input Set : A:\Cms0173.txt  
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Use of n's or Xaa's(NEW RULES):

Use of n's and/or Xaa's have been detected in the Sequence Listing.

Use of <220> to <223> is MANDATORY if n's or Xaa's are present.

in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

✓ Seq#:174; N Pos. 24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42

Seq#:174; N Pos. 43,44,45,46,47,48,49

✓ Seq#:177; N Pos. 41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59

Seq#:177; N Pos. 60,61,62,63,64,65,66

✓ Seq#:178; N Pos. 24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42

Seq#:178; N Pos. 43,44,45,46,47,48,49

## VERIFICATION SUMMARY

PATENT APPLICATION: US/10/008,524

DATE: 07/03/2002

TIME: 09:41:32

Input Set : A:\Cms0173.txt

Output Set: N:\CRF3\07032002\J008524.raw

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:2900 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:174  
L:2900 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:174  
L:2900 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:174 after pos.:0  
L:2940 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:177  
L:2940 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:177  
L:2940 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:177 after pos.:0  
L:2941 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:177  
L:2941 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:177  
L:2941 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:177 after pos.:60  
L:2954 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:178  
L:2954 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:178  
L:2954 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:178 after pos.:0